

CLAIMS

I/We claim:

- [c1] 1. A portable wireless telecommunication apparatus for exchanging communications with a wireless network, the apparatus comprising:
- a display screen;
 - at least one input device that includes a four-way joystick or keypad;
 - a radio;
 - memory; and
 - a processor coupled to the display screen, input device, radio, and memory, wherein the processor is programmed to:
 - automatically gather information from the wireless network;
 - automatically display the gathered information on the display screen;
 - automatically gather additional information from the wireless network;
 - automatically update the display on the display screen with the gathered additional information without input from a user to request updating of the display;
 - display multiple icons or commands associated with functions of at least one application executed on the wireless telecommunication apparatus, wherein the multiple icons or commands are displayed in a horizontal row or vertical column on the display screen;
 - in response to user actuation of the four-way joystick or keypad and selection, highlight and select one of the multiple icons or commands;
 - execute the function associated with the selected one of the multiple icons or commands; and

wherein the wireless telecommunication apparatus includes an input button, coupled to the processor, for initiating a customer support call or local help function when the user actuates the input button.

[c2] 2. The apparatus of claim 1 wherein the four-way joystick or keypad includes an associated selection button to generate the selection, wherein the multiple icons or commands are associated with functions performed by an electronic mail, electronic messaging or calendaring application executed by the processor, and

wherein the additional information gathered includes at least two of the following: local and home location current times, name of new network service provider when accessing a new wireless network, loss of certain functionality when accessing a new wireless network, wireless service plan balance, expiration date of a certain wireless service component, number of wireless service minutes used, number of wireless service minutes remaining, number of SMS messages sent, or number of SMS messages permitted or remaining under the wireless service plan.

[c3] 3. The apparatus of claim 1, further comprising:
an automated data collection device, a biometric reader, or media output device coupled to the processor.

[c4] 4. The apparatus of claim 1 wherein the additional information gathered includes at least two of the following: local and home location current times, name of new network service provider when accessing a new wireless network, loss of certain functionality when accessing a new wireless network, wireless service plan balance, expiration date of a certain wireless service component, number of wireless service minutes used, number of wireless service minutes remaining, number of SMS messages sent, or number of SMS messages permitted or remaining under the wireless service plan.

[c5] 5. The apparatus of claim 1 wherein the four-way joystick or keypad includes an associated selection button to generate the selection, wherein the multiple icons or commands are associated with functions performed by an electronic mail, electronic messaging, word processing, spreadsheet, calculator, contacts, or calendaring application executed by the processor.

[c6] 6. The apparatus of claim 1 wherein the processor is further programmed to:

display a new screen of data, and
automatically highlight the one of the multiple icons or commands previously selected, and

if a particular one of the multiple icons or commands is highlighted, then a select button or switch on the four-way joystick or keypad to be temporarily reconfigured to have an equivalent function of a center action button of the four-way joystick or keypad.

[c7] 7. The apparatus of claim 1 wherein the input button is a dedicated button on the wireless telecommunication apparatus, or is a dual-function keypad button that initiates the customer support call or local help function when the user actuates and holds the dual-function keypad button.

[c8] 8. A method for navigating data screens on a mobile device, the method comprising:

displaying a first screen, within a sequence of screens, containing data and multiple displayed elements for performing particular functions associated with the displayed screen;

receiving user input to indicate one of the multiple displayed elements;

selecting the one indicated element to perform a function corresponding with the one indicated element;

performing the function corresponding with the one indicated element;

after performing the function, displaying a next screen within the sequence of screens; and

indicating for selection, within the next screen, the one element indicated and selected in the first screen.

[c9] 9. The method of claim 8 wherein the indicating includes using a distinctive color to indicate the one element for selection.

[c10] 10. A computer-readable medium storing a display description for permitting a mobile device display to provide for navigating and selecting of multiple functions, the display comprising:

a first screen portion displaying data; and

a second screen portion displaying an action ribbon having multiple elements for performing particular functions associated with the displayed data, wherein:

receiving navigation commands from at least one input device on the apparatus permits execution of the navigation commands when a user navigates to an area within the action ribbon of the second screen portion, and disabling the navigation commands when a user selects an area within the first screen portion, but not within the action ribbon of the second screen portion.

[c11] 11. The computer-readable medium of claim 10 wherein a particular intensity of display indicates a selected area within the action ribbon of the second screen portion, and wherein a selected area within the action ribbon may execute multiple functions.

[c12] 12. The computer-readable medium of claim 10 wherein the action ribbon includes multiple icons each associated with a different function performed by an electronic mail, electronic messaging, word processing, spreadsheet, calculator, contacts, or calendaring application running on the apparatus.

[c13] 13. The computer-readable medium of claim 10 wherein the second screen portion is overlaid upon the first screen portion.

[c14] 14. An apparatus for permitting a user to access customer support functions associated with wireless telecommunications service or with operation of a wireless mobile device, the apparatus comprising:

button means on the mobile device for user-selection;

means for receiving user-selection of the button means; the selection occurring in a particular manner based upon how the button means functions; and

means for displaying, in response to the user-selection, an indication of customer support functions for the mobile device and for user-selection for execution on the mobile device.

[c15] 15. The apparatus of claim 14 wherein the button means is a special purpose button on the mobile device.

[c16] 16. The apparatus of claim 14 wherein the button means includes a dual purpose special button on the mobile device.

[c17] 17. The apparatus of claim 14 wherein the button means includes a dual purpose common button on the mobile device, and wherein the means for receiving includes means for receiving the user-selection of the dual purpose common button to initiate the indication of the customer support functions by detecting pressing and holding of the dual purpose common button.

[c18] 18. The apparatus of claim 14 wherein the button means includes a dual purpose common button on the mobile device.

[c19] 19. The apparatus of claim 14 wherein the button means includes a dual purpose common button on the mobile device, and wherein actuation of the common

button launches a menu display that includes the indication of customer support functions.

[c20] 20. The apparatus of claim 14 wherein the means for displaying includes means for displaying, on the mobile device, a menu identifying customer support functions for the mobile device.

[c21] 21. A computer-readable medium whose contents cause at least one telecommunication mobile device to perform a method to provide automatic network access configuration for the mobile device, the method comprising:

- accessing a network using the mobile device;
- receiving at the mobile device and from the network a carrier identification associated with transmission of wireless signals over the network;
- looking up access configuration settings for the network based on the carrier identification, wherein the access configuration settings are locally stored in a database on the telecommunication mobile device; and
- automatically configuring the telecommunication mobile device for communication over the network using the locally stored access configuration settings.

[c22] 22. The computer-readable medium of claim 21 wherein the receiving includes receiving, associated with the carrier identification, a country code, a carrier identifier, and a cell-tower identifier.

[c23] 23. The computer-readable medium of claim 21 wherein the looking up includes determining that the local database lacks the access configuration settings, and accessing from the network new access configuration settings for storage in the database of the telecommunication mobile device.

[c24] 24. The computer-readable medium of claim 21 wherein the computer-readable medium is a memory of the mobile device.

[c25] 25. The computer-readable medium of claim 21 wherein the computer-readable medium is a logical node in a network receiving the contents.

[c26] 26. The computer-readable medium of claim 21 wherein the computer-readable medium is a computer-readable disk.

[c27] 27. The computer-readable medium of claim 21 wherein the computer-readable medium is a data transmission medium carrying a generated data signal containing the contents.

[c28] 28. A method for automatically displaying information on a mobile telecommunications device, where the mobile telecommunications device exchanges communications with a wireless network, and wherein the wireless network is coupled to a server that has access to wireless subscriber information, the method comprising:

automatically gathering information from the wireless network, wherein the information is not, or is in addition to, wireless signal strength and network status;

automatically providing the gathered information to the mobile telecommunications device so that the gathered information may be readily perceived by a wireless subscriber associated with the mobile telecommunications device;

automatically gathering additional information from the wireless network, wherein the additional information includes information associated with an account of the wireless subscriber; and

automatically providing the additional information to the mobile telecommunications device so that the additional information may be readily perceived by the wireless subscriber without input from the wireless subscriber requesting the additional information.

[c29] 29. The method of claim 28, further comprising receiving input from the wireless subscriber to call a customer service number before the automatically gathering of the additional information.